142978

ANALYTICAL REPORT

JOB NUMBER: 200947

Prepared For:

RMT
222 S. Riverside Plaza
Suite 820
Chicago, IL 60606

Attention: Rae Mindock

Date: 11/10/2000

Signature

11/14/00
Date

Name: Eric A. Lang

Title: Project Manager

2417 Bond Street
University Park, IL 60466

PHONE: (708) 534-5200
FAX..: (708) 534-5211

SAMPLE INFORMATION
Date: 11/10/2000

Job Number.: 200947
Customer...: RMT
Attn.....: Rae Mindock

Project Number.....: 20000334
Customer Project ID....: RIVERDALE CHEMICAL
Project Description....: Riverdale Chemical

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200947-1	DSL-15	Soil	11/03/2000	09:30	11/03/2000	10:30

LABORATORY TEST RESULTS

Job Number: 200947 Date: 11/10/2000

CUSTOMER: RMT PROJECT: RIVERDALE CHEMICAL ATTN: Rae Mindock

Customer Sample ID: DSL-15
Date Sampled.....: 11/03/2000
Time Sampled.....: 09:30
Sample Matrix.....: Soil

Laboratory Sample ID: 200947-1
Date Received.....: 11/03/2000
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
1311	TCLP Extraction					
	TCLP Extraction, TCLP	Complete			11/08/00	pjm
8081A	Organochlorine Pesticide Analysis					
	gamma-BHC (Lindane), TCLP	ND	2.5	ug/L	11/09/00	lsm
	Heptachlor, TCLP	ND	2.5	ug/L	11/09/00	lsm
	Heptachlor epoxide, TCLP	ND	2.5	ug/L	11/09/00	lsm
	Endrin, TCLP	ND	5.0	ug/L	11/09/00	lsm
	Methoxychlor, TCLP	ND	25	ug/L	11/09/00	lsm
	Toxaphene, TCLP	ND	50	ug/L	11/09/00	lsm
	Chlordane, TCLP	ND	10	ug/L	11/09/00	lsm
3520C	Extraction for TCLP (Chlor.Pest.)					
	Continuous Liq./Liq. Extraction, TCLP	Complete			11/08/00	dak

* In Description = Dry Wgt.

QUALITY CONTROL RESULTS

Job Number.: 200947 Report Date.: 11/10/2000

CUSTOMER: RMT PROJECT: Riverdale Chemical ATTN: Rae Mindock

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: 8081A Units.....: ug/L Analyst...: lsm
Method Description.: Organochlorine Pesticide Analysis Batch.....: 5811

MB	Method Blank		5737		11/09/2000	1511

Parameter/Test Description	QC Result	Q	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
gamma-BHC (Lindane)	0								
Heptachlor	0								
Heptachlor epoxide	0								
Endrin	0								
Methoxychlor	0								
Toxaphene	0								
Chlordane	0								

LCS	Laboratory Control Sample	000KWLPTFA	5737		11/09/2000	1545

Parameter/Test Description	QC Result	Q	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
gamma-BHC (Lindane)	0.010			0.010000		100		56-125	
Heptachlor	0.009			0.010000		90		50-129	
Heptachlor epoxide	0.010			0.010000		100		59-126	
Endrin	0.010			0.010000		100		30-154	
Methoxychlor	0.106			0.100000		106		38-149	

LCS	Laboratory Control Sample	000HWLPTTA	5737		11/09/2000	1618

Parameter/Test Description	QC Result	Q	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Toxaphene	1.091			1.002000		109		65-138	

EB1	Extraction Blank 1		5737		11/09/2000	1651

Parameter/Test Description	QC Result	Q	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
gamma-BHC (Lindane)	0								
Heptachlor	0								
Heptachlor epoxide	0								
Endrin	0								
Methoxychlor	0								
Toxaphene	0								
Chlordane	0								

MS	Matrix Spike	000KWLPTFA	200947-1		11/09/2000	1905

Parameter/Test Description	QC Result	Q	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
gamma-BHC (Lindane)	0.011			0.010000	0	110		56-125	
Heptachlor	0.012			0.010000	0.002	120		50-129	
Heptachlor epoxide	0.010			0.010000	0	100		59-126	
Endrin	0.011			0.010000	0	110		30-154	
Methoxychlor	0.113			0.100000	0	113		38-149	
Toxaphene	0			0.000000	0	0		65-138	

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

SURROGATE RECOVERIES REPORT

Job Number.: 200947 Report Date.: 11/10/2000

CUSTOMER: RMT PROJECT: RIVERDALE CHEMICAL ATTN: Rae Mindock

Method.....: Organochlorine Pesticide Analysis Batch.....: 5811
Method Code.....: 8081 Analyst.....: lsm

Surrogate	Units
Decachlorobiphenyl (surr)	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
5737	TCLP	MB	1.000	0.030	0.04014	75	10-117		11/09/2000	1511
5737	TCLP	LCS	1.000	0.031	0.04014	77	10-117		11/09/2000	1545
5737	TCLP	LCS	1.000	0.031	0.04014	77	10-117		11/09/2000	1618
5737	TCLP	EB1	1.000	0.038	0.04014	95	10-117		11/09/2000	1651
200932-1	TCLP		1.000	0.040	0.04014	100	10-117		11/09/2000	1725
200932-3	TCLP		1.000	0.045	0.04014	112	10-117		11/09/2000	1758
200947-1	TCLP		1.000	0.042	0.04014	105	10-117		11/09/2000	1832
200947-1	TCLP	MS	1.000	0.042	0.04014	105	10-117		11/09/2000	1905
200947-1	TCLP	MS	1.000	0.042	0.04014	105	10-117		11/09/2000	1938

Surrogate	Units
Tetrachloro-m-xylene (surr)	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
5737	TCLP	MB	1.000	0.023	0.04012	57	15-130		11/09/2000	1511
5737	TCLP	LCS	1.000	0.023	0.04012	57	15-130		11/09/2000	1545
5737	TCLP	LCS	1.000	0.020	0.04012	50	15-130		11/09/2000	1618
5737	TCLP	EB1	1.000	0.027	0.04012	67	15-130		11/09/2000	1651
200932-1	TCLP		1.000	0.027	0.04012	67	15-130		11/09/2000	1725
200932-3	TCLP		1.000	0.037	0.04012	92	15-130		11/09/2000	1758
200947-1	TCLP		1.000	0.034	0.04012	85	15-130		11/09/2000	1832
200947-1	TCLP	MS	1.000	0.035	0.04012	87	15-130		11/09/2000	1905
200947-1	TCLP	MS	1.000	0.035	0.04012	87	15-130		11/09/2000	1938

LABORATORY CHRONICLE

Job Number: 200947

Date: 11/10/2000

CUSTOMER: RMT

PROJECT: RIVERDALE CHEMICAL

ATTN: Rae Mindock

Lab ID: 200947-1 Client ID: DSL-15 Date Recvd: 11/03/2000 Sample Date: 11/03/2000

METHOD	DESCRIPTION	RUN#	BATCH#	PREP #	DATE/TIME ANALYZED		DILUTION
3520C	Extraction for TCLP (Chlor.Pest.)	1	5737		11/08/2000	0000	
8081A	Organochlorine Pesticide Analysis	1	5811	5737	11/09/2000	1832	1.000
1311	TCLP Extraction	1	5794		11/08/2000	1304	

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/10/2000

REPORT COMMENTS

1) The results presented in this report relate only to the analytical testing and condition of sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.

3) Reporting limits are adjusted for preparation sample size, sample dilutions and moisture content if analyzed on a dry weight basis.

4) The test results for the noted analytical method(s) meet the requirements of NELAC and the Illinois EPA Rules and Regulations Part 186, where applicable.

   IEPA Certification ID# 100201
   NY Certification ID# 11006

5) According to 40CFR Part 136.3, pH, Sulfite, Chloride Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g., pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/10/2000

Glossary of flags, qualifiers and abbreviation

Inorganic Qualifiers

U	Analyte was not detected at or above the reporting limit.
<	Not detected at or above the reporting limit.
J	Result is less than the RL, but greater than or equal to the method detection limit.
B	CLP: Result is less than the CRDL, but greater than or equal to the instrument detection limit.
S	Result was determined by the Method of Standard Additions.

Inorganic Flags

^	ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, MRL: Instrument related QC exceed the upper or lower control limits.
H	MB, EB: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
*	LCS, LCD, MSD, MD, PS, PSD: Batch QC exceeds the upper or lower control limits.
N	MS, MSD: Spike recovery exceeds the upper or lower control limits.
4	MS, MSD: The analyte present in the original sample 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
E	SD: Serial dilution exceeds the control limits.
W	PS: Post-digestion spike was outside 85-115% control limits.
+	MSA correlation coefficient is less than 0.995.

Organic Qualifiers (Q - Column)

U	Analyte was not detected at or above the reporting limit.
ND	Compound not detected.
J/B	Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
M	Manually integrated compound.
Q	Result was qualitatively confirmed, but not quantified.
I	Indicates the presence of an interference.
C	Pesticide identification was confirmed by GC/MS.
Y	The chromatographic response resembles a typical fuel pattern.
Z	The chromatographic response does not resemble a typical fuel pattern.
E	Result exceeded calibration range, secondary dilution required.

Organic Flags (Flags Column)

^	MB,EB, MLE: Batch QC is greater than reporting limit.
*	LCS, LCD, CCV, MS, MSD, Surrogate, RS:Batch QC exceeds the upper or lower control limits.
A	Concentration exceeds the instrument calibration range or below the reporting limit.
B	Compound was found in the blank and sample.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
H	Alternate peak selection upon analytical review
I	Indicates the presence of an interfence, recovery is not calculated.
P	The lower of the two values is reported when the percent difference between the results of two GC columns is greater than 25%.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/10/2000

Abbreviations

Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
Contract	Contract laboratory identification code
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
Dil Fac	Dilution Factor
DL	Secondary dilution was performed
DL Fac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB	Extraction Blank
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A
ISB	Interference Check Sample B
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group
Lab ID	An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PACK	Packed Column
PREPF	Calculation factor used by the Laboratory's Information Management System (LIMS)
PS	Post Spike
PSD	Post Spike Duplicate
RA	Re-analysis
RE	Re-extraction and analysis
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RS	Reference Standard
RT	Retention Time
RTW	Retention Time Window
SampleID	A 9 digit number unique for each sample, the first six digits are referred as the job number
SCB	Seeded Control Blank
SD	Serial Dilution
UCB	Unseeded Control Blank

NOTES

One or a combination of these data qualifiers and abbreviations may appear in the analytical report.

SEVERN TRENT SERVICES

STL Chicago
2417 Bond Street
University Park, IL 60466
Phone: 708-534-5200
Fax: 708-534-5211

Report To:

Contact:
Company:
Address:
Phone:
Fax:
E-Mail:

Bill To:

Contact:
Company:
Address:
Phone:
Fax:
PO#: Quote:

Shaded Areas For Internal Use Only ____ of ____

Lab Lot#

Package Sealed	Samples Sealed
Yes No	Yes No
Received on Ice	**Samples Intact**
Yes No	Yes No

Temperature °C of Cooler
unchilled

Sampler Name:
Signature:
Project Name:
Project Number:
Project Location:
Lab PM:
Date Required
Hard Copy: ____/____/____
Fax: ____/____/____

Within Hold Time	Preserv. Indicated
Yes No	Yes No NA
pH Check OK	**Res Cl_2 Check OK**
Yes No NA	Yes No NA

Sample Labels and COC Agree
Yes No COC not present

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Refrg # / # / Cont. / Volume / Preserv	Additional Analyses / Remarks
							X	

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME

Matrix Key

WW	= Wastewater	SE	= Sediment
W	= Water	SO	= Solid
S	= Soil	DS	= Drum Solid
SL	= Sludge	DL	= Drum Liquid
MS	= Miscellaneous	L	= Leachate
OL	= Oil	WI	= Wipe
A	= Air	O	= _____

Container Key
1. Plastic
2. VOA Vial
3. Sterile Plastic
4. Amber Glass
5. Widemouth Glass
6. Other _____

Preservative Key
1. HCl, Cool to 4
2. H_2SO_4, Cool to 4
3. HNO_3, Cool to 4
4. NaOH, Cool to 4
5. NaOH/Zn, Cool to 4
6. Cool to 4
7. None

COMMENTS

Date Received
Courier: **Hand Delivered** ☐
Bill of Lading